

REMARKS

The Examiner objects to several claims. The applicant amended claims 7, 9, 35 and 39 per Examiner's recommendations.

In claims 1,4,6 and 39 the expression "in a predetermined place" is eliminated.

In claim 28 fthe last statement starting with "trigger sending entity..." is eliminated.

\* \* \*

Claim 35 is rejected under 35 U.S.C. 102(e) as being anticipated by Fraser US patent No. 5,894,476. The applicant believes that the Examiner's arguments are not accurate and need further clarification.

In the previous response filed by the Applicant in the USPTO on January 13, 2003 the Applicant argued that the STRB signal 107 of Fraser does not necessarily trigger the beginning of the data transmission or the start-of-cell (SOC) 109 signal, but rather controls the flow of information and its clock period after data transmission has already started (Fraser states that STRB 107 can be considered as a clock). In other words, in claim 35 of the present invention the trigger signal from the receiver actually starts the transmission of the data by the transmitter, which is used for the transmitter upon the receipt of the trigger signal from the receiver, whereas in Fraser, the signal 107 is a **necessary** (the Examiner calls the signal 109 **permissive** in the Office communication dated February 5, 2003) but **not sufficient** condition for the transmitter to start sending data: **the transmitter** has to be ready as well. In Fraser the "actual" trigger signal indicating the start of the data transmission is the SOC signal 109 sent by the **transmitter**, whereas in the

present invention the signal indicating start of the data transmission is the trigger signal sent by the **receiver**, as mentioned above. That is one fundamental difference between claim 35 of the present invention and Fraser's disclosure. To make this point even more clear, claim 35 is amended to use the word "required" instead of "needed" in two places (the same amendments are made in claim 28).

A further important difference between Fraser teachings and claim 35 of the present invention is that in Fraser no data is sent from the transmitter to the receiver unless the transmitter receives the STRB signal 107 from the receiver to transmit every cell of the data **after the transmission of the data from the transmitter to the receiver started**. Indeed, according to Fraser, the STRB signal 107 is needed as an indication to begin a transfer of a new cell on a next rising edge of STRB (column 3, lines 51-53 of Fraser) and the STRB signal 107 is needed as a clock signal which may be inhibited or stretched by the receiver as a form of a flow control (column 4, lines 2-4 of Fraser). Figures 4 and 5 of Fraser illustrates that said stretching occurs during the period 403 (in Figure 4) and during the period 505 (in Figure 5), when STRB signal 107 is not provided to the transmitter. In contrast, according to the present invention (see claim 35), no control signal (in addition to just one trigger signal) is required to be sent from the Transmitting entity to the Receiving entity in order to ensure and sustain said transmission of the data from the Transmitting entity to the Receiving entity.

Furthermore, it is described in column 3, lines 51-53 of Fraser: "The SOC is asserted by the Transmitter on the rising edge of STRB to indicate to the receiver that the transmitter

will begin transfer of a new cell on the next rising edge of STRB". This means that, according to Fraser, both the SOC signal and the STRB signal must be transmitted to ensure said transmission of the data from the transmitter to the receiver. Indeed, the SOC signal 109 is needed as an indication to begin transferring of a new cell on a next rising edge of the STRB signal 107 (column 3, lines 51-53 of Fraser) and the STRB signal 107 is needed as a clock signal which may be inhibited or stretched by the receiver as the form of the flow control (column 4, lines 2-4 of Fraser) as explained above. According to the present application, only one signal is required, i.e., the asynchronous trigger signal T transmitted by the Receiving entity to the Transmitting entity to ensure and sustain said transmission of the data. That is another important difference between claim 35 of the present invention and Fraser.

The applicant further argues that Fraser does not describe an idle data generating entity, which generates idle data sent by the transmitter to the receiver upon receiving the trigger signal from the receiver if the data in the transmitter is not available, as stated in claim 35 of the present invention. The Examiner refers to invalid data 209 (col. 4, line 25) in Fraser's disclosure. Our interpretation of the invalid data 209 is that this is just "no data" at all and in Fraser's disclosure there is no any indication or even any hint that there is a special "invalid data generating entity" which generates such "invalid" data. Furthermore, the transmitter (see Figure 2 in Fraser) does not send the SOC 109 signal (the actual trigger signal) indicating the start of the data transmission when "invalid data" 209 starts. On the contrary, in the present invention, sending of the idle data is always preceded by the trigger pulse from the receiver as mentioned above.

Based on the presented arguments, withdrawal of the 35 U.S.C. 102(e) rejection of claim 35 is requested.

\* \* \*

Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being anticipated by Fraser US Patent No. 5,894,476. The applicant believes that the Examiner's arguments are not accurate and need further clarification.

Regarding independent claim 39, similar arguments, made in reference to claim 35, are applicable and are summarized below.

The important difference between Fraser teaching and claim 39 of the present invention is that in Fraser no data is sent from the transmitter to the receiver unless the transmitter receives the STRB signal 107 from the receiver to transmit every cell of the data **after the transmission of the data from the transmitter to the receiver started**. Indeed, according to Fraser, the STRB signal 107 is needed as an indication to begin a transfer of a new cell on a next rising edge of STRB (column 3, lines 51-53 of Fraser) and the STRB signal 107 is needed as a clock signal which may be inhibited or stretched by the receiver as a form of a flow control (column 4, lines 2-4 of Fraser). Figures 4 and 5 of Fraser illustrates that said stretching occurs during the period 403 (in Figure 4) and during the period 505 (in Figure 5), when STRB signal 107 is not provided to the transmitter. In contrast, according to the present invention (see claim 39), no control signal (in addition to just one trigger signal) is required to be sent from the Transmitting entity to the Receiving entity in order to ensure and sustain said transmission of the data from the Transmitting entity to the Receiving entity.

Furthermore, it is described in column 3, lines 51-53 of Fraser: "The SOC is asserted by the Transmitter on the rising edge of STRB to indicate to the receiver that the transmitter will begin transfer of a new cell on the next rising edge of STRB". This means that, according to Fraser, both the SOC signal and the STRB signal must be transmitted to ensure said transmission of the data from the transmitter to the receiver. Indeed, the SOC signal 109 is needed as an indication to begin transferring of a new cell on a next rising edge of the STRB signal 107 (column 3, lines 51-53 of Fraser) and the STRB signal 107 is needed as a clock signal which may be inhibited or stretched by the receiver as the form of the flow control (column 4, lines 2-4 of Fraser) as explained above. According to the present application, only one signal is required, i.e., the asynchronous trigger signal T transmitted by the Receiving entity to the Transmitting entity to ensure and sustain said transmission of the data. That is another important difference between claim 39 of the present invention and Fraser.

Claim 40 is a dependent claim of independent claim 39. Since claim 39 is not anticipated by Fraser, as shown above, dependent claim 2, referred to novel and non-obvious independent claim 39, is also non-obvious because non-obviousness of claim 1 will compel non-obviousness of rejected dependent claim 2. Moreover, additional arguments regarding independent claim 39, as in regard to claim 35, are applicable and summarized below.

Fraser does not describe an idle data generating entity which generates idle data sent by the transmitter to the receiver upon receiving the trigger signal from the receiver if the data in the transmitter is not available, as stated in claim 40 of the present invention. The Examiner refers to invalid data 209 (col.

4, line 25) in Fraser's disclosure. Our interpretation of the invalid data 209 is that this is just "no data" at all and in Fraser's disclosure there is no any indication or even any hint that there is a special "invalid data generating entity" which generates such "invalid" data. Furthermore, the transmitter (see Figure 2 in Fraser) does not send the SOC 109 signal (the actual trigger signal) indicating the start of the data transmission when "invalid data" 209 starts. On the contrary, in the present invention, sending of the idle data is always preceded by the trigger pulse from the receiver as mentioned above.

Withdrawal of the 35 U.S.C. 103(a) rejection of claims 39 and 40 is requested.

The objections and rejections of the Official Action of December 8, 2003, having been obviated by amendment or shown to be inapplicable, withdrawal thereof is requested, and passage of the claims to issue is earnestly solicited.

Respectfully submitted,

Date: 3/12/04

A. Frenkel  
Anatoly Frenkel  
Registration No. 54,106

WARE, FRESSOLA, VAN DER SLUYS  
& ADOLPHSON LLP  
755 Main Street, PO Box 224  
Monroe CT 06468  
(203) 261-1234